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Sequence Listing was accepted.

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Reviewer: Saleem, Syed (ASRC)

Timestamp: [year=2012; month=2; day=28; hr=15; min=7; sec=5; ms=767;]

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Application No: 10589726 Version No: 2.0

Input Set:

Output Set:

Started: 2012-02-22 16:39:17.745
Finished: 2012-02-22 16:39:19.893
Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 148 ms
Total Warnings: 19
Total Errors: 0
No. of SeqIDs Defined: 30
Actual SeqID Count: 30

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SEQUENCE LISTING

<110> HAWIGER, JACK J.
JO, DAEWOONG

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SIGNALING

<130> 20004.0002.000000

<140> 10589726

<141> 2012-02-22

<150> PCT/US2005/007523

<151> 2005-03-04

<150> 60/550,037

<151> 2004-03-04

<160> 30

<170> PatentIn version 3.5

<210> 1

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 1

Met Gly Ser Ser His His His His His His Ser Ser Leu Val Pro Arg

1 5 10 15

Gly Ser His

<210> 2

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 2

Ala Ala Val Leu Leu Pro Val Leu Leu Ala Ala Pro

1 5 10

<210> 3

<211> 211

<212> PRT

<213> Homo sapiens

<400> 3

Met Val Ala His Asn Gln Val Ala Ala Asp Asn Ala Val Ser Thr Ala
1 5 10 15

Ala Glu Pro Arg Arg Arg Pro Glu Pro Ser Ser Ser Ser Ser Ser Ser
20 25 30

Pro Ala Ala Pro Ala Arg Pro Arg Pro Cys Pro Ala Val Pro Ala Pro
35 40 45

Ala Pro Gly Asp Thr His Phe Arg Thr Phe Arg Ser His Ala Asp Tyr
50 55 60

Arg Arg Ile Thr Arg Ala Ser Ala Leu Leu Asp Ala Cys Gly Phe Tyr
65 70 75 80

Trp Gly Pro Leu Ser Val His Gly Ala His Glu Arg Leu Arg Ala Glu
85 90 95

Pro Val Gly Thr Phe Leu Val Arg Asp Ser Arg Gln Arg Asn Cys Phe
100 105 110

Phe Ala Leu Ser Val Lys Met Ala Ser Gly Pro Thr Ser Ile Arg Val
115 120 125

His Phe Gln Ala Gly Arg Phe His Leu Asp Gly Ser Arg Glu Ser Phe
130 135 140

Asp Cys Leu Phe Glu Leu Leu Glu His Tyr Val Ala Ala Pro Arg Arg
145 150 155 160

Met Leu Gly Ala Pro Leu Arg Gln Arg Arg Val Arg Pro Leu Gln Glu
165 170 175

Leu Cys Arg Gln Arg Ile Val Ala Thr Val Gly Arg Glu Asn Leu Ala
180 185 190

Arg Ile Pro Leu Asn Pro Val Leu Arg Asp Tyr Leu Ser Ser Phe Pro
195 200 205

Phe Gln Ile
210

<210> 4

<211> 225

<212> PRT

<213> Homo sapiens

<400> 4

Met Val Thr His Ser Lys Phe Pro Ala Ala Gly Met Ser Arg Pro Leu
1 5 10 15

Asp Thr Ser Leu Arg Leu Lys Thr Phe Ser Ser Lys Ser Glu Tyr Gln
20 25 30

Leu Val Val Asn Ala Val Arg Lys Leu Gln Glu Ser Gly Phe Tyr Trp
35 40 45

Ser Ala Val Thr Gly Gly Glu Ala Asn Leu Leu Leu Ser Ala Glu Pro
50 55 60

Ala Gly Thr Phe Leu Ile Arg Asp Ser Ser Asp Gln Arg His Phe Phe
65 70 75 80

Thr Leu Ser Val Lys Thr Gln Ser Gly Thr Lys Asn Leu Arg Ile Gln
85 90 95

Cys Glu Gly Gly Ser Phe Ser Leu Gln Ser Asp Pro Arg Ser Thr Gln
100 105 110

Pro Val Pro Arg Phe Asp Cys Val Leu Lys Leu Val His His Tyr Met
115 120 125

Pro Pro Pro Gly Ala Pro Ser Phe Pro Ser Pro Pro Thr Glu Pro Ser
130 135 140

Ser Glu Val Pro Glu Gln Pro Ser Ala Gln Pro Leu Pro Gly Ser Pro
145 150 155 160

Pro Arg Arg Ala Tyr Tyr Ile Tyr Ser Gly Gly Glu Lys Ile Pro Leu
165 170 175

Val Leu Ser Arg Pro Leu Ser Ser Asn Val Ala Thr Leu Gln His Leu
180 185 190

Cys Arg Lys Thr Val Asn Gly His Leu Asp Ser Tyr Glu Lys Val Thr
195 200 205

Gln Leu Pro Gly Pro Ile Arg Glu Phe Leu Asp Gln Tyr Asp Ala Pro
210 215 220

Leu
225

<210> 5

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polypeptide

<400> 5

Met Gly Ser Ser His His His His His Ser Ser Gly Leu Val Pro
1 5 10 15

Arg Gly Ser Met Val Ala Arg Asn Gln Val Ala Ala Asp Asn Ala Ile
20 25 30

Ser Pro Ala Ala Glu Pro Arg Arg Arg Ser Glu Pro Ser Ser Ser Ser
35 40 45

Ser Ser Ser Ser Pro Ala Ala Pro Val Arg Pro Arg Pro Cys Pro Ala
50 55 60

Val Pro Ala Pro Ala Pro Gly Asp Thr His Phe Arg Thr Phe Arg Ser
65 70 75 80

His Ser Asp Tyr Arg Arg Ile Thr Arg Thr Ser Ala Leu Leu Asp Ala
85 90 95

Cys Gly Phe Tyr Trp Gly Pro Leu Ser Val His Gly Ala His Glu Arg
100 105 110

Leu Arg Ala Glu Pro Val Gly Thr Phe Leu Val Arg Asp Ser Arg Gln
115 120 125

Arg Asn Cys Phe Phe Ala Leu Ser Val Lys Met Ala Ser Gly Pro Thr
130 135 140

Ser Ile Arg Val His Phe Gln Ala Gly Arg Phe His Leu Asp Gly Ser
145 150 155 160

Arg Glu Thr Phe Asp Cys Leu Phe Glu Leu Leu Glu His Tyr Val Ala
165 170 175

Ala Pro Arg Arg Met Leu Gly Ala Pro Leu Arg Gln Arg Arg Val Arg
180 185 190

Pro Leu Gln Glu Leu Cys Arg Gln Arg Ile Val Ala Ala Val Gly Arg
195 200 205

Glu Asn Leu Ala Arg Ile Pro Leu Asn Pro Val Leu Arg Asp Tyr Leu
210 215 220

Ser Ser Phe Pro Phe Gln Ile Ala Ala Val Leu Leu Pro Val Leu Leu
225 230 235 240

Ala Ala Pro

<210> 6

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polypeptide

<400> 6

Met Gly Ser Ser His His His His His Ser Ser Gly Leu Val Pro
1 5 10 15

Arg Gly Ser Ala Ala Val Leu Leu Pro Val Leu Leu Ala Ala Pro Met
20 25 30

Val Ala Arg Asn Gln Val Ala Ala Asp Asn Ala Ile Ser Pro Ala Ala
35 40 45

Glu Pro Arg Arg Arg Ser Glu Pro Ser Ser Ser Ser Ser Ser Ser
50 55 60

Pro Ala Ala Pro Val Arg Pro Arg Pro Cys Pro Ala Val Pro Ala Pro

65	70	75	80
Ala Pro Gly Asp Thr His Phe Arg Thr Phe Arg Ser His Ser Asp Tyr			
85	90	95	
Arg Arg Ile Thr Arg Thr Ser Ala Leu Leu Asp Ala Cys Gly Phe Tyr			
100	105	110	
Trp Gly Pro Leu Ser Val His Gly Ala His Glu Arg Leu Arg Ala Glu			
115	120	125	
Pro Val Gly Thr Phe Leu Val Arg Asp Ser Arg Gln Arg Asn Cys Phe			
130	135	140	
Phe Ala Leu Ser Val Lys Met Ala Ser Gly Pro Thr Ser Ile Arg Val			
145	150	155	160
His Phe Gln Ala Gly Arg Phe His Leu Asp Gly Ser Arg Glu Thr Phe			
165	170	175	
Asp Cys Leu Phe Glu Leu Leu Glu His Tyr Val Ala Ala Pro Arg Arg			
180	185	190	
Met Leu Gly Ala Pro Leu Arg Gln Arg Arg Val Arg Pro Leu Gln Glu			
195	200	205	
Leu Cys Arg Gln Arg Ile Val Ala Ala Val Gly Arg Glu Asn Leu Ala			
210	215	220	
Arg Ile Pro Leu Asn Pro Val Leu Arg Asp Tyr Leu Ser Ser Phe Pro			
225	230	235	240
Phe Gln Ile			

<210> 7

<211> 244

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 7

Met Gly Ser Ser His His His His His Ser Ser Gly Leu Val Pro
1 5 10 15

Arg Gly Ser Met Val Thr His Ser Lys Phe Pro Ala Ala Gly Met Ser
20 25 30

Arg Pro Leu Asp Thr Ser Leu Arg Leu Lys Thr Phe Ser Ser Lys Ser
35 40 45

Glu Tyr Gln Leu Val Val Asn Ala Val Arg Lys Leu Gln Glu Ser Gly
50 55 60

Phe Tyr Trp Ser Ala Val Thr Gly Gly Glu Ala Asn Leu Leu Leu Ser
65 70 75 80

Ala Glu Pro Ala Gly Thr Phe Leu Ile Arg Asp Ser Ser Asp Gln Arg
85 90 95

His Phe Phe Thr Leu Ser Val Lys Thr Gln Ser Gly Thr Lys Asn Leu
100 105 110

Arg Ile Gln Cys Glu Gly Gly Ser Phe Ser Leu Gln Ser Asp Pro Arg
115 120 125

Ser Thr Gln Pro Val Pro Arg Phe Asp Cys Val Leu Lys Leu Val His
130 135 140

His Tyr Met Pro Pro Pro Gly Thr Pro Ser Phe Ser Leu Pro Pro Thr
145 150 155 160

Glu Pro Ser Ser Glu Val Pro Glu Gln Pro Pro Ala Gln Ala Leu Pro
165 170 175

Gly Ser Thr Pro Lys Arg Ala Tyr Tyr Ile Tyr Ser Gly Gly Glu Lys
180 185 190

Ile Pro Leu Val Leu Ser Arg Pro Leu Ser Ser Asn Val Ala Thr Leu
195 200 205

Gln His Leu Cys Arg Lys Thr Val Asn Gly His Leu Asp Ser Tyr Glu
210 215 220

Lys Val Thr Gln Leu Pro Gly Pro Ile Arg Glu Phe Leu Asp Gln Tyr

225 230 235 240

Asp Ala Pro Leu

<210> 8

<211> 256

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polypeptide

<400> 8

Met Gly Ser Ser His His His His His His Ser Ser Gly Leu Val Pro
1 5 10 15

Arg Gly Ser Met Val Thr His Ser Lys Phe Pro Ala Ala Gly Met Ser
20 25 30

Arg Pro Leu Asp Thr Ser Leu Arg Leu Lys Thr Phe Ser Ser Lys Ser
35 40 45

Glu Tyr Gln Leu Val Val Asn Ala Val Arg Lys Leu Gln Glu Ser Gly
50 55 60

Phe Tyr Trp Ser Ala Val Thr Gly Gly Glu Ala Asn Leu Leu Leu Ser
65 70 75 80

Ala Glu Pro Ala Gly Thr Phe Leu Ile Arg Asp Ser Ser Asp Gln Arg
85 90 95

His Phe Phe Thr Leu Ser Val Lys Thr Gln Ser Gly Thr Lys Asn Leu
100 105 110

Arg Ile Gln Cys Glu Gly Gly Ser Phe Ser Leu Gln Ser Asp Pro Arg
115 120 125

Ser Thr Gln Pro Val Pro Arg Phe Asp Cys Val Leu Lys Leu Val His
130 135 140

His Tyr Met Pro Pro Pro Gly Thr Pro Ser Phe Ser Leu Pro Pro Thr
145 150 155 160

Glu Pro Ser Ser Glu Val Pro Glu Gln Pro Pro Ala Gln Ala Leu Pro
165 170 175

Gly Ser Thr Pro Lys Arg Ala Tyr Tyr Ile Tyr Ser Gly Gly Glu Lys
180 185 190

Ile Pro Leu Val Leu Ser Arg Pro Leu Ser Ser Asn Val Ala Thr Leu
195 200 205

Gln His Leu Cys Arg Lys Thr Val Asn Gly His Leu Asp Ser Tyr Glu
210 215 220

Lys Val Thr Gln Leu Pro Gly Pro Ile Arg Glu Phe Leu Asp Gln Tyr
225 230 235 240

Asp Ala Pro Leu Ala Ala Val Leu Leu Pro Val Leu Leu Ala Ala Pro
245 250 255

<210> 9

<211> 256

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polypeptide

<400> 9

Met Gly Ser Ser His His His His His His Ser Ser Gly Leu Val Pro
1 5 10 15

Arg Gly Ser Ala Ala Val Leu Leu Pro Val Leu Leu Ala Ala Pro Met
20 25 30

Val Thr His Ser Lys Phe Pro Ala Ala Gly Met Ser Arg Pro Leu Asp
35 40 45

Thr Ser Leu Arg Leu Lys Thr Phe Ser Ser Lys Ser Glu Tyr Gln Leu
50 55 60

Val Val Asn Ala Val Arg Lys Leu Gln Glu Ser Gly Phe Tyr Trp Ser
65 70 75 80

Ala Val Thr Gly Gly Glu Ala Asn Leu Leu Leu Ser Ala Glu Pro Ala
85 90 95

Gly Thr Phe Leu Ile Arg Asp Ser Ser Asp Gln Arg His Phe Phe Thr
100 105 110

Leu Ser Val Lys Thr Gln Ser Gly Thr Lys Asn Leu Arg Ile Gln Cys
115 120 125

Glu Gly Gly Ser Phe Ser Leu Gln Ser Asp Pro Arg Ser Thr Gln Pro
130 135 140

Val Pro Arg Phe Asp Cys Val Leu Lys Leu Val His His Tyr Met Pro
145 150 155 160

Pro Pro Gly Thr Pro Ser Phe Ser Leu Pro Pro Thr Glu Pro Ser Ser
165 170 175

Glu Val Pro Glu Gln Pro Pro Ala Gln Ala Leu Pro Gly Ser Thr Pro
180 185 190

Lys Arg Ala Tyr Tyr Ile Tyr Ser Gly Gly Glu Lys Ile Pro Leu Val
195 200 205

Leu Ser Arg Pro Leu Ser Ser Asn Val Ala Thr Leu Gln His Leu Cys
210 215 220

Arg Lys Thr Val Asn Gly His Leu Asp Ser Tyr Glu Lys Val Thr Gln
225 230 235 240

Leu Pro Gly Pro Ile Arg Glu Phe Leu Asp Gln Tyr Asp Ala Pro Leu
245 250 255

<210> 10

<211> 1121

<212> DNA

<213> Mus musculus

<400> 10

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acactctcgt tttggggtac cctgtgactt ccaggcagca cgcgagggtcc actggcccca 180

gctcgggcga ccagctgtct gggacgtgtt gactcatctc ccatgaccct gcggtgcctg 240

gagccctccg ggaatggagc ggacaggacg cgagaccagt gggggaccgc ggggttgccg 300

gaggaacagt ccccgaggc ggcgcgtctg gcgaaagccc tgcgcgagct cagtcaaaca	360
ggatggtact ggggaagtat gactgttaat gaagccaaag agaaattaaa agaggctcca	420
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aagacgtcag ctggaccgac taacctgcgg attgagtacc aagatgggaa attcagattg	540
gattctatca tatgtgtcaa gtccaagctt aaacagtttg acagtgtggt tcatctgatt	600
gactactatg tccagatgtg caaggataaa cggacaggcc cagaagcccc acggaatggg	660
actgttcacc tgtacctgac caaacctctg tatacatcag caccactct gcagcatttc	720
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gaaagagaac ccagaggccc tcctctggat aactgcgcag aattctctct taaggacagt	960
tgggctcagt ctaacttaaa ggtgtgaaga tgtagctagg tatttttaaag ttccccttag	1020
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<210> 11

<211> 2746

<212> DNA

<213> Homo sapiens

<400> 11

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